

Content available at: https://www.ipinnovative.com/open-access-journals

IP Indian Journal of Library Science and Information Technology

Journal homepage: https://www.ijlsit.org/



Original Research Article

Adoption of open access in social science journals: An analytical study of DOAJ

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ARTICLE INFO

Article history: Received 19-04-2022 Accepted 06-05-2022 Available online 29-06-2022

Keywords:
Open Access Journals
DOAJ
Library and Information Science
Sociology
Political Science
History
Geography
Licensing
Indexed
Publication

ABSTRACT

The present study is based on data taken from the Directory of Open Access Journals (DOAJ), which is the recognized database of fully open access peer-reviewed scholarly journals. The objective of the study has been to explore through a quantitative approach, the inclusion of Library & Information Science (LIS), Sociology, Political Science, History, and Geography journals from various perspectives. It is found that there are 177 LIS journals, 198 Sociology Journals, 123 Political Science Journals, 232 History Journals and 206 Geography Journals indexed in DOAJ published from 65 countries in 41 different languages. English is the dominant language of publication for 604 journals. On the basis of the total journals published in DOAJ of select Journals of the Social Sciences Brazil is ranked 1st with 157 Journals followed by Spain (104). Only one Journal of LIS is covered by DOAJ. The maximum number of Journals used CC BY licensing i.e., 361. The study found that the year 2017 and 2020 can be marked as most significant years because the highest number of (135 each) journals were added in DOAJ. Many journals do not charge article processing charges and most of the journals did not fulfill the guidelines for the DOAJ Seal and also discuss about different types of peer review.

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1. Introduction

The Directory of Open Access Journals (DOAJ) is a metadata service that indexes high quality, peer reviewed open access research journals and their articles. The aim of the directory is to increase the visibility and ease of usage of the open access journals thereby promoting their increased accessibility, usage and impact (Directory of Open Access Journals, 2015). The initiative to start the Directory of Open Access Journals (DOAJ) project was taken up in 2002 at the first Nordic Conference on Scholarly Communication (NCSC). The idea was to develop a single window service approach that made it easier for libraries and aggregators to integrate the Open Access

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journals data in their services, for facilitating the OA-Publishers in escalating the visibility of the journals for readers seeking OA-Material (Sahoo et al., 2017). As a result, DOAJ was launched in 2003 at Lund University, Sweden with 300 Open Access journals and currently it has grown to over 15763 Open Access journals having 5,572,447 Articles from 134 countries which cover subjects like Science, Technology, Medicine, the Social Sciences and Humanities. It is a nonprofit making organization managed presently by the Infrastructure Services for Open Access CIC (Community Interest Company) based in the United Kingdom (Johansson, A-L., & Wahlgren, I., 2008). ¹⁻¹¹

The DOAJ defines Open Access Journals as "Journals that use a funding model that does not charge readers or their institutions for access and secures the rights of users to read, download, copy, distribute, print, search, or link the

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full texts of these articles or use them for any other lawful purpose" (Directory of Open Access Journals, 2022).

The present study seeks to discover the coverage across various parameters of Library and Information Science, Sociology, Political Science, History, and Geography journals in the DOAJ. Open Access (OA) publications can be broadly categorised into Gratis OA and Libre OA, which determines how the publication will be used by the end users. Gratis OA means that a publication will be viewed and printed at no cost, while Libre OA allows wider use by using Creative Commons licenses (OA and Reuse, 2022). DOAJ works on the principle that for open access to work effectively, user rights, through licencing, and copyright ownership need to be clear. For this reason, DOAJ only accepts journals that operate a form of Libre Open Access (Kumari et al., n.d.).

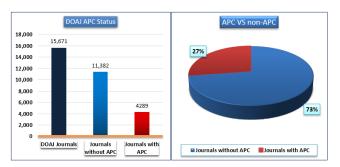


Fig. 1: Current status of APC in DOAJ

According to the Figure 1 above, 73% of the DOAJ journals do not impose APC, whereas for 27% of the OA journals it is mandatory for the authors to pay the APC. It may be articulated here that APC levied by the publisher acts as a hindrance or bottleneck for authors, particularly those from developing economies and with no organisational support in the form of funding.

1.1. Objectives

The author has worked upon the following research objectives:

- To ascertain the number of Library & Information Science (LIS), Sociology, Political Science, History and Geography journals produced in their respective countries indexed in the DOAJ.
- To ascertain the adoption of the Open Access process by Indian LIS, Sociology, Political Science, History and Geography journals.
- 3. To determine the language coverage of LIS, Sociology, Political Science, History and Geography journals.
- To find out the APC charges or handling fee of LIS, Sociology, Political Science, History and Geography journals.
- 5. To obtain a ranking and distribution of LIS, Sociology, Political Science, History and Geography journals

- according to the licensing model adopted by the journals.
- To find out the year of addition of the LIS, Sociology, Political Science, History and Geography journals to the DOAJ.

2. Materials and Methods

The requisite data has been collected from the website of the DOAJ which is available at https://doaj.org/. On fetching the subject browser which is displayed as "Browse Subjects" the list of the subjects on which journals and articles are indexed was revealed and from this given list the subjects LIS, Sociology, Political Science, History and Geography were chosen. 12–16

Each and every journal on the subjects of Library and Information Science, Sociology, Political Science, History, Geography that was indexed in the DOAJ from the year of its inception in 2003 to 2021 was examined. For each journal on the subjects of LIS, Sociology, Political Science, History and Geography, relevant metadata like, country of publication, language, year added in DOAJ, Article Processing Charges (APC) of journal, and license attributes etc, were incorporated on an MS Excel spreadsheet and analyzed keeping in mind the objectives of the study.

3. Results and Discussion

The result showed 177 journals on LIS, 198 journals in Sociology, 123 journals in Political Science, 232 journals in History and 206 journals in Geography which were indexed in the DOAJ on the date mentioned. ^{17–22}

Table 1 Shows the number of documents in various Journals of LIS, Sociology, Political Science, History and Geography. LIS had the maximum number (23.96%) documents indexed in the DOAJ whereas Political Science had the minimum (13.14%). LIS ranked 1st, History ranked 2nd followed by Geography, Sociology and Political Science. The ranking on the basis of the total number of articles was also similar but it was observed to vary on the basis of the journals indexed in the DOAJ. In the latter case History was ranked 1st Geography ranked 2nd followed by Sociology, LIS and Political Science.

4. Country of Publication: Number of DOAJ Indexed Journals

The distribution of the DOAJ indexed journals segregated on the basis of the country of their publication has been presented in Table 2. The list has been presented subjectwise as well as country of publication-wise.

herefore, reflects the country-wise distribution of theLibrary and Information Science, Sociology, Political Science, History, Geography Journals indexed in the DOAJ. Altogether there are 177 journals of LIS, 198 journals of Sociology, 123 journals of Political Science, 232 Journals of

Sr. No.	Documents	LIS	Sociology	Political Science	History	Geography	Total
1	No. of Journals	177 (18.91%)	198 (21.15%)	123 (13.14%)	232 (24.78%)	206 (22.00%)	936 (100%)
2	No. of Articles	54354 (23.96 %)	42693 (18.82 %)	28872 (12.73%)	51161 (22.56%)	49690 (21.91%)	226770 (100%)

Table 1: Total number of documents in the DOAJ injournals on various subjects

History and 206 journals of Geography listed in the DOAJ. These journals have been published from 65 countries of the world. On the basis of the total number of journals published and indexed in the DOAJ the Social Sciences journals had Brazil ranking as the 1^{st} having 157 (16.77% of the total journals i.e. 936). It was followed by Spain having 104 (11.11%) such journals, Indonesia (53) (5.66%), the United States (50) (5.34%) and so on. $^{23-26}$

4.1. Indian journals indexed in DOAJ

Table 3 reflects the Indian Library and Information Science, Sociology, Political Science, History and Geography journals that have been indexed in the DOAJ. There is only one journal of the LIS titled, Annals of Library & Information Studies, published by NISCAIR, New Delhi that has a quarterly periodicity and has been indexed in the DOAJ. This journal has been added during the year 2009. The other subjects of Sociology, Political Science, History and Geography did not have an even a single Journal indexed in the DOAJ upto 15th January 2021.

4.2. Language of publication of DOAJ indexed journals

Language is a vital mode of communication and most scholarly publications are in a language having popularity for a specific target audienc Table 4 reflects the language assessment on the basis of language and it's featuring on the Open Access for Library and Information Science, Sociology, Political Science, History, Geography Journals.

4.3. Types of licensing of DOAJ indexed journals

It was observed that the LIS, Sociology, Political Science, and Geography journals indexed in the DOAJ are published in 41 different languages out of which English is the predominant language. There are 604 (35.59%) Journals published in English. The second dominant language is Spanish with 303 (17.85%) Journals followed by Portuguese having 230 (13.55%) journals, French having 134 (7.89%) journals, Italian having 75 (4.41%) journals and Russian having 52 (3.06%) journals besides others.

Thus, there is a wide range of languages used in the selected subjects which have been published in DOAJ indexed journals.

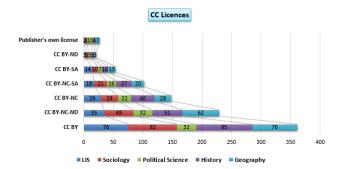


Fig. 2: Types of licensing of DOAJindexed journals

Figure 4 shows that the DOAJ has a strong preference for the use of creative commons licenses, especially the least restrictive one. The licenses details are as follows:

- 1. CC BY (Attribution) this license lets others distribute, remix, adapt, and build upon the work, even commercially, as long as they retain the credit for the original creation. This is the most accommodating of licenses offered. It is also most recommended for maximum dissemination and use of licensed materials (Research Guides: Copyright and Online Classes: Creative Commons License, 2019). Findings of the study revealed that the CC-BY license is used by 38% journals.
- 2. CC BY-NC-ND (Attribution-Non-Commercial-No Derives) license is the most restrictive of all the six main licenses, only allowing others to download the work and share it as long as they credit the work. They cannot, however, change the work in any way or use them commercially (Creative Commons WikiEducator, 2022). Findings of the study showed that the CC BY-NC-ND license is used by 24% Journals.
- 3. The CC BY-NC (Attribution-Non-Commercial) license lets others remix, adapt, and build upon the work non-commercially, and although their new work must also acknowledge the author and be non-commercial, they do not have to license their derivative works on the same terms (Queen's University, 2018). Findings of the study brought out that the CC BY-NC license is used by 16% journals.
- 4. The CC BY-NC-SA (Attribution-Non-Commercial-Share Alike) license lets others remix, adapt, and build

Table 2: Distribution of journals on the basis of country-wise publication

Sr. No.	Countries	Journals LIS	Sociology	Political Science	History	Geography	Total
1	Argentina	2	12	4	12	4	34
2	Australia	_	4	1	3	3	11
3	Austria	1	2	2	2	2	9
4	Bahamas	-	-	-	-	1	1
5	Belarus	-	-	-	1	1	2
6	Belgium	-	3	1	-	2	6
7	Brazil	25	23	16	45	48	157 (16.77%)
8	Bulgaria	1	_	-	-	1	2
9	Canada	4	7	1	3	-	15
10	Chile	1	3	-	3	5	12
11	China	1	_	-	-	1	2
12	Colombia	2	4	11	7	4	28
13	Costa Rica	2	1	2	1	1	7
14	Croatia	1	2	-	3	2	8
15	Cuba	3	_	-	-	-	3
16	Czechia	_	3	1	-	-	4
17	Denmark	-	-	-	-	1	1
18	Ecuador	1	1	-	-	-	2
19	Egypt	1	_	_	-	-	1
20	Estonia	_	_	-	1	-	1
21	Finland	1	_	-	3	2	6
22	France	2	10	1	7	6	26
23	Germany	4	3	3	4	2	16
24	Greece	_	_	_	2	_	2
24	Guam	_	_	-	-	1	1
25	Hungary	_	_	-	-	1	1
26	Iceland	_	_	1	-	2	3
27	India	1	_	-	-	-	1
28	Indonesia	12	10	10	5	16	53 (5.66%)
29	Iran	8	1	4	-	3	16
30	Iraq	_	1	-	-	-	1
31	Italy	4	14	6	21	3	48
32	Japan	1	_	-	-	1	2
33	Kenya	1	_	-	-	-	1
34	Korea	2	_	1	1	-	4
35	Lithuania	2	1	2	-	1	6
36	Luxembourg	_	_	-	1	-	1
37	Malaysia	1	_	-	-	1	2
38	Mexico	1	4	3	2	1	11
39	Moldova	_	1	1	-	-	2
40	Nepal	_	1	-	-	-	1
41	Netherlands	2	1	-	1	2	6
42	North Macedonia	-	-	-	-	2	2
43	Norway	1	3	2	3	2	11
44	Pakistan	1	1	_	_	_	2
45	Peru	_	-	1	_	2	3
46	Poland	11	13	6	1	8	39
47	Portugal	1	4	1	11	3	20
48	Qatar	1	-	_	-	-	1
49	Romania	4	5	6	10	19	44
50	Russian	1	14	3	5	5	28
51	Serbia	1	3	1	1	3	9
52	Singapore	1	-	-	-	-	1
53	Slovakia	-	_	_	_	3	3
	Slovenia		1			1	2

Table 2 C	ont						
55	South Africa	1	-	-	1	-	2
56	Spain	13	19	8	48	16	104 (11.11%)
57	Sweden	1	-	2	-	1	4
58	Switzerland	5	2	-	-	1	8
59	Taiwan	3	1	1	-	1	6
60	Turkey	1	3	7	8	11	30
61	Ukraine	7	5	2	1	2	17
62	United Kingdom	8	1	5	9	6	29
63	United States	28	10	4	6	2	50 (5.34%)
64	Uruguay	1	1	1	-	-	3
65	Venezuela	1	-	2	-	-	3
	Total	177	198	123	232	206	936

Table 3: Indian DOAJindexed journals

Sr. No.	Details	LIS	Sociology	Political Science	History	Geography
1	Title of the Journal	Annals of Library & Information Studies	-	-	-	-
2	Publisher & Place	NISCAIR, New Delhi	-	-	-	-
3	Date when added in the DOAJ	2009	-	-	-	-
4	Periodicity	Quarterly	-	-	-	-

upon the work non-commercially as long as they duly credit show that CC BY-NC-SA license is used by 11% of the journals.

- 5. The CC BY-SA (Attribution-Share Alike) license lets others remix, adapt, and build upon the work even for commercial purposes, as long as they give due credit to the author and license their new creations under the identical terms (About the Licenses Creative Commons, 2017). Findings of the study show that the CC BY-SA License is used by 6% journals.
- 6. CC BY-ND (Attribution-No Derives) license lets others reuse the work for any purpose, including commercially; however, it cannot be shared with others in an adapted form and credit must be duly provided to the author (What Are Creative Commons Licenses?, 2022). The DOAJ allows publishers to supply the license information at the journal level. Findings of the study show that the CC BY-ND License is used by 2% of the journals.

Licensing a journal with a Creative Commons (CC) license is among the functional ways of showing exactly how a journal is Open Access. Such licensing is most beneficial for authors as it reflects, if there are any limits to creating derivative works (Open Access - Creative Commons, 2016). When examining type of licensing attribution provided by the LIS, Sociology, Political Science, History and Geography journals it was seen that, there were seven operational types of Creative Commons attribution. Out of these 7 types, the highest number of

Icon	Description	Acronym
© BY	Attribution alone	BY
© (1) (2)	Attribution + NoDerivatives	BY-ND
© 0 0	Attribution + ShareAlike	BY-SA
© (1) (S)	Attribution + Noncommercial	BY-NC
© (1)(S)(E)	Attribution + Noncommercial + NoDerivatives	BY-NC-ND
© 0 3 0 BY NO SA	Attribution + Noncommercial + ShareAlike	BY-NC-SA

Fig. 3: Icons, description, acronyms for licenses

journals used CC BY licensing i.e., 361 (38.32%) followed by CC BY-NC-ND with 229 (24.30%), CC BY-NC with 148 (15.71%), CC BY-NC-SA having 102 (10.82%) and so on as depicted in Table 5.

Table 6 Indicates that the DOAJ started functioning in 2003 when there were just 4 LIS journals and only 1 journal of Geography included in the DOAJ indexing. There was observed a steady rise in the inclusion of LIS, Sociology, Political Science, History and Geography journals in the Open Access domain and the number through 177, 198, 123, 232 to 206 respectively till 15th January 2021.

The years 2017 and 2020 can be earmarked as a significant year with the highest number of (135) journals being added on in the DOAJ. Also 120 journals were added on in 2018 whereas 102 journals had been added on in

Table 4: Language of publication of select social science journals in the DOAJ

Sr.	T	Journals					
No.	Language	LIS	Sociology	Political Science	History	Geography	Total
1	Arabic	3	5	-	-	-	8
2	Basque		-	-	1	-	1
3	Belarusian	1	-	-	1	1	3
4	Bulgarian	-	-	1	2	-	3
5	Catalan	3	4	_	10	1	18
6	Chinese	4	1	-	-	1	6
7	Croatian	1	1	-	2	3	7
8	Czech	1	3	1	-	2	7
9	Danish	-	-	1	1	3	5
10	Dutch		1	2	1	-	4
11	English	121 (20.03%)	127 (21.02%)	74 (12.25%)	150 (24.83%)	132 (21.85 %)	604 (35.59%)
12	Finnish	1	-	-	3	-	4
13	French	9 (6.71%)	32 (23.88%)	13 (9.70%)	62 (46.26%)	18 (13.43%)	134 (7.89%)
14	Galician	-	1	-	-	-	1
15	German	9	7	4	18	2	40
16	Icelandic	-	-	1	-	1	2
17	Indonesian	10	10	10	4	14	48
18	Italian	6	13	7	44	5	75 (4.41%)
19	Japanese	-	-	-	-	1	1
20	Kurdish	-	1	-	-	-	1
21	Lithuanian	3	1	1	-	1	6
22	Malay	-	-	1	-	1	2
23	Mongolian	-	-	-	1	-	1
24	Modern Greek	-	-	-	2		2
25	Nepali (macrolanguage)	-	1	-	-	-	1
25	Norwegian	-	1	-	3	-	4
26	Norwegian Bokmal	1	1	2	-	2	6
27	Norwegian Nynorsk	-	-	-	1	-	1
28	Persian	4	1	4	-	3	12
29	Polish	11	8	2	1	2	24
30	Portuguese	35 (15.21%)	37 (16.08%)	21 (9.13%)	76 (33.04%)	61 (23.52%)	230 (13.55%)
31	Romanian	2	3	3	2	3	13
32	Russian	9	19	8	9	7	52 (3.06%)
33	Serbian	1	1	-	-	1	3
34	Slovak	1	3	-	-	3	7
35	Slovenian	-	1	-	-	1	2
36	Spanish	41 (13.53%)	64 (21.12%)	39 (12.87%)	104 (34.32%)	55 (18.15%)	303 (17.85%)
37	Sweden	-	-	-	-	-	0
38	Swedish	1	1	1	3	2	8
39	Turkish	1	3	8	8	9	29
40	Ukrainian	8	5	2	1	2	18
41	Urdu	1	-	-	-	_	1
Total		288 (16.97%)	356 (20.97%)	20 (1.17%)	344 (20.27%)	331 (19.50%)	1697 (100%)

Table 5: Licensing of select social science journals in DOAJ

C. M.	Licensing						
Sr. No.	Attribution	LIS	Sociology	Political Science	History	Geography	Total
1	CC BY	76 (21.05%)	82 (22.71 %)	32 (8.86%)	95 (26.31%)	76 (21.05%)	361 (38.32%)
2	CC BY-NC-ND	35 (15.28%)	49 (21.39%)	32 (13.97%)	51 (22.27%)	62 (27.07%)	229 (24.30%)
3	CC BY-NC	29 (19.59%)	29 (19.59%)	22 (14.86%)	40 (27.02%)	28 (18.91%)	148 (15.71%)
4	CC BY-NC-SA	18 (17.64%)	21 (20.58%)	16 (15.68%)	27 (26.47%)	20 (19.60%)	102 (10.82%)
5	CC BY-SA	14 (25.92%)	10 (18.51%)	7 (12.96%)	10 (18.51%)	13 (24.07%)	54 (5.73%)
6	CC BY-ND	3 (14.28%)	5 (23.80%)	5 (23.80%)	5 (23.80%)	3 (14.28%)	21 (2.22%)
7	Publisher's own license	2 (7.40%)	4 (14.81%)	10 (37.03%)	4 (14.81%)	7 (25.92%)	27 (2.86%)
8	Total	177	200	124	232	209	942

Table 6: Year-wise addition of select social science journals in the DOAJ

C. Na	Year			Journals Added			
Sr. No.		LIS	Sociology	Political Science	History	Geography	Total
1	2003	5	-	-	-	1	6
2	2004	2	6	4	1	-	13
3	2005	3	3	-	6	3	15
4	2006	6	1	3	3	5	18
5	2007	6	2	5	7	5	25
6	2008	4	4	2	5	2	17
7	2009	3	5	-	5	3	16
8	2010	6	11	5	10	9	41
9	2011	5	2	2	3	11	23
10	2012	9	8	2	9	10	38
11	2013	16	11	6	17	10	60
12	2014	1	9	2	8	6	26
13	2015	12	20	6	13	17	68
14	2016	14	10	14	22	15	75
15	2017	32	19	15	30	39	135
16	2018	16	27	19	31	27	120
17	2019	18	22	20	25	17	102
18	2020	19	37	18	36	25	135
19	2021	-	1	-	1	1	3
	Total	177	198	123	232	206	936

2019. Though the number of additions of the LIS journals was observed to vary from year to year but the steady rise in the total number of journals in the DOAJ reflects the popularity of the LIS, Sociology, Political Science, History and Geography journals in the Open Access domain.

Table 7 Shows the availability of Open Access journals and describes thatthe final published version of any article is permanently and freely available online for anyone and anywhere so that it can be read in Gold OA. In this case, the publishers of journals charge a specific amount from the authors which has been designated as "Article Processing Charges" (APC) or handling charges. The Article Publishing Charges (APC) is usually applicable

if published in Gold OA (Smith et al., 2021). The Hybrid Open Access describes a publishing model where some articles are made openly available, against the payment of an Article Processing Charge (APC), while all other articles remain Closed Access and the journal as a whole is presented as subscription-based (Rettberg, 2018). When it comes to APC charges of LIS, Sociology, Political Science, History and Geography journals indexed in the DOAJ, it has been found that among 936 Journals almost 867 (86%) Journals have no APC while 69 (14%) journals ask for an APC.

The DOAJ Seal is a mark of certification for Open Access journals and is awarded by the DOAJ to journals that

Table 7: Article processing charges (APC) of the select social science journals in DOAJ

Sr. No.	APCs	Yes	No
1	LIS	07	170
2	Sociology	18	180
3	Political Science	10	113
4	History	5	227
5	Geography	29	177
	Total	69 (14%)	867 (86%)

Table 8: DOAJ seal of select social science journals in DOAJ

Sr. No.	DOAJ Seal	Yes	No
1	LIS	15	162
2	Sociology	5	193
3	Political Science	3	120
4	History	6	226
5	Geography	5	201
Total		34 (4%)	902 (96%)

achieve a high level of openness, adhere to Best Practices and maintain high publishing standards. The DOAJ Seal of Approval for OA Journals is a mark of certification for open access journals. To receive this Seal, the journal must comply with the following 7 conditions:

Table 9 Shows that 902 (96%) Journals lackDOAJ seal and 34 (4%) have the certification of the DOAJ seal.

Table 10 Shows that the Peer review is the evaluation of work which is completed by one or more people with similar competencies as the producers of the work. The DOAJ uses different types of peer review. There were 631 (67.41%) Journals which had been Double blind peer reviewed followed by 154 (16.45%) journals which were Blind peer reviewed and 127 (13.57%) Journals which were Peer reviewed. Only 4 journals (0.43%) are Open peer reviewed.



Fig. 4: System of peer review

4.4. Research Findings

The Directory of Open Access Journals contains an impressive list of select journals of Social Sciences

i.e. Library and Information Science, Sociology, Political Science, History and Geography. LIS has the maximum number of documents indexed in the DOAJ whereas Political Science has the minimum number of documents indexed in the DOAJ.

On the basis of the total Journals published and indexed in the DOAJ among the Social Sciences subjects Brazil has been ranked at the first position with 157 (16.77%) Journals followed by Spain which has 104 (11.11%), Indonesia has 53 (5.66%), The United States has 50 (5.34%) and so on. Only one journal of LIS has been covered by the DOAJ.

It was observed that the LIS, Sociology, Political Science, History and Geography journals indexed in the DOAJ are published from 65 countries and 41 languages out of which English is the predominant language.

There are seven types of Creative Commons attribution given to journals and out of these the highest number of journals used the CC BY licensing i.e. 361 (38.32%). The year 2017 and 2020 have been earmarked as the most significant years because the highest number of journals (135) were added on in the DOAJ. Also there were 120 journals added on in 2018 and 102 journals added in 2019. It has been found that among 936 journals almost 867 (86%) journals have no APC whereas 69 (14%) Journals ask for an APC. The study showed that the 902 (96%) journals lack the DOAJ seal and 34 (4%) Journals have the certification of the DOAJ seal. A significant finding was that the maximum of these journals 631(67.41%) were double blind peer reviewed. ^{23–27}

4.5. Conclusion

Established by the University of Lund in 2003 and now managed by the Infrastructure Services for Open Access C.I.C (Community Interest Company), the DOAJ retains its position as the most comprehensive searchable database

Table 9: Seven criteria for DOAJ seal

Sr. No.	Attribute	Seven Criteria
i.	use	DOIs as permanent identifiers;
ii.	provides	DOAJ with article metadata;
iii.	deposits	Content with a long-term digital preservation or archiving program;
iv.	embeds	Machine-readable CC licensing information in articles;
v.	allows	Generous reuse and mixing of content, in accordance with a CC BY, CC BY-SA or CC BY-NC license;
vi.	has	A deposit policy registered with a deposit policy registry;
vii.	allows	The author to hold the copyright without restrictions.

Table 10: Peer review of select social science journals in DOAJ

C. Na	Type of Peer Review			Number of Journals			
Sr. No.		LIS	Sociology	Political Science	History	Geography	Total
1	Double blind peer review	104	150	89	159	129	631 (67.41%)
2	Peer review	32	16	12	36	31	127 (13.57%)
3	Blind peer review	29	28	22	30	45	154 (16.45%)
4	Editorial review	9	4	-	6	-	19 (2.03%)
5	Open peer review	2	-	-	1	1	4 (0.43%)
6	Committee review	1	-	-	-	-	1 (0.11%)

of free scientific and scholarly content in full-text format. The DOAJ is a significantly reliable choice for the scholarly community that is perpetually in need of immediate access to reliable peer-reviewed content.

The number of scholarly journals in LIS, Sociology, Political Science, History and Geography indexed in the DOAJ has increased over the years and the inclusion of one Indian LIS Journals in the database is most encouraging. In a country like India where most of the research and academic libraries do not have adequate funds to subscribe to a large number of journals in any field of knowledge, the visibility of 936 Journals of the LIS, Sociology, Political Science, History and Geography in the DOAJ has tremendous potential to benefit the entire scholarly community.

5. Source of Funding

None.

6. Conflict of Interest

None.

References

- About The Licenses Creative Commons; 2017. Available from: https://creativecommons.org/licenses/.
- Aswathy S, Gopikuttan A. Open Access literature productivity of Physics: A DOAJ Perspective. *Libr Philosophy Pract*. 2013;Available from: https://digitalcommons.unl.edu/libphilprac/971/.
- Chakravarty R. Status of Open Access LIS journals: An empirical study of DOAJ. J Indian Libr Assoc. 2020;56(3):88–99.
- Chakravarty R, Mahajan P. Open access journals initiatives in India. Int J Inf Dissemination Technol. 2011;1(1):9–12.

- Creative Commons; 2022. Available from: https://wikieducator.org/ OER_Handbook/educator_version_one/License/Creative_commons.
- Dhanavandan S, Tamizhchelva M. Library and Information Science Journals in DOAJ: An empirical study. *Int J Libr Sci.* 2014;12:3.
- Directory of Open Access Journals. (2015). Available from: Doaj. org.https://doaj.org/about/.
- Directory of Open Access Journals. (2022, March 25).; 2022. Available from: https://www.doaj.org/.
- Fayaz L, Rafiq R, Shah GJ. Indian contribution to open access literature: A case study of DOAJ & open DOAR. Chinese Librarianship: An Int Electron J. 2008;29(1):1–10.
- Goyal V, Gupta GK, Kumar A. An analysis of DOAJ: Contribution in the field of Physics. Int J Inf Dissemination Technl. 2014;4(1):92–4.
- Johansson AL, Wahlgren I. The One Stop Shop to Open Access Journals - DOAJ. Scie Com Info. 2008;1(4):4.
- 12. Kumari P, Gakhar H, Sinhababu A, Sharma J, Chakravarty R. Libre Open Access in Science Journals: An Analytical Study of Libre Open Access in Science Journals: An Analytical Study of DOAJ DOAJ Libre Open Access in Science Journals: An Analytical Study of DOAJ; 2022. Available from: https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=9856&context=libphilprac.
- Kuri R. Foot Marks of LIS Journals in DOAJ: An analytical study. *Asian J Multidiscip Stud.* 2014;2(5):80–6.
- maity A, Teli S. A Bibliometric Analysis on the Directory of Open Access Journals (DOAJ) in the Subject Domain of LIS from the Year 2004-2014. *Int J Innov Res Sci Eng Technol*. 2015;4(4):1955–62.
- Mondal D. India's contribution to DOAJ with special reference to computer science discipline: A study. *Int J Inf Dissemination Technol*. 2014;4(1):1–7.
- Nashipudi M, Ravi B. Contribution of India to Universe of Knowledge in DOAJ: A case study. *Int J Inf Dissemination Technol*. 2015;5(3):171–5.
- Oa R. Notice and choice regarding the storage of your data (use of cookies); 2022. Available from: https://open-access.network/en/ information/open-access-primers/open-access-and-reuse.
- Open Access Creative Commons. (2016, November 29).;
 Available from: https://open-access.network/en/information/

- open-access-primers/open-access-and-reuse.
- 19. Pujar SM. A study. Annals of Library and Information Studies; 2014.
- About Creative Commons Licenses. Pressbooks.pub; Queen's University; 2009. Available from: https://ecampusontario.pressbooks. pub/authoringguide/chapter/creative-commons-licenses/.
- Research Guides: Copyright and Online Classes: Creative Commons License; 2019. Available from: https://shawneesu.libguides.com/c. php?g=938252&p=6779125.
- Rettberg N. The worst of both worlds: Hybrid Open Access. OpenAIRE; 2018. Available from: https://www.openaire.eu/blogs/the-worst-of-both-worlds-hybrid-open-access.
- Sahoo J, Birtia T, Mohanty B. Open access journals in library and information science: A study on DOAJ. *Int J Inf Dissemination Technol*. 2017;7(2):116–9.
- Sahoo J, Mohanty B, Priyadarshini L. Indian Contribution To Open Access Scholarly Publishing In DOAJ; 2017. Available from: https://core.ac.uk/download/pdf/188120975.pdf.
- Smith AC, Merz L, Borden JB, Gulick CK, Kshirsagar AR, Bruna EM. Assessing the effect of article processing charges on the geographic diversity of authors using Elsevier's "Mirror Journal" system. *Q Sci* Stud. 2021;2(4):1123–43.
- Dhanavandan T. A Study on Open Access Journals from South Asian Countries registered in DOAJ in International Research. J Libr Inf Sci.

2014;4(3):1-15.

 Creative Commons. Available from: https://www.wur.nl/en/article/ What-are-Creative-Commons-licenses.htm.

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Cite this article: Chakravarty R, Sinhababu A, Heenam, Sharma J. Adoption of open access in social science journals: An analytical study of DOAJ. *IP Indian J Libr Sci Inf Technol* 2022;7(1):44-53.